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ABSTRACT

The aim of this study was to assess the length of latencies or reaction times that it took for 15 teachers and prospective teachers to judge the degree of "ethnic-nonstandardness" or "confidence-eagerness" in a child's speech. A set of 2-minute video-tapes made from interviews with six 11 and 12 year old boys from six ethno-status groups--Black middle and lower, Mexican-American middle and lower, and Anglo middle and lower--was shown to the subjects, who were asked, as they watched the tapes, to signal the duration of time necessary to mark 15 scale cards and sequence them in any order they felt to be valid. Time lapses in the sequencing of the cards and the amount of viewing time relative to each scale completion were then recorded and tabulated. It It was found that it took an average of 1 and one-half minutes to rate a child's speech as either "ethnic-nonstandard" or "confident-eager." (See also TE 002 000 and TE 002 002.) (JM)

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LATENCY OF TEACHERS' SEMANTIC DIFFERENTIAL RATINGS OF CHILDREN'S SPEECH

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PURPOSE

The aim in the present research was to assess the degree to which Ss would tend to choose and to respond with shorter latencies in filling out selected semantic differential scales related to ratings of a child's ethnicity-nonstandardness as against confidence-eagerness in that child's speech. Prior research (Williams, in press) with audio tapes indicated that teacher-Ss tended to judge the children's speech in terms of the above dimensions. This same two-factor judgmental model was found to obtain in similar ratings but where videotapes were employed as stimuli and where children represented Black (B), Mexican-American (M), and Anglo (A) ethnic groups. Casual observation had indicated, and speculation suggested, that ratings of ethnicity-nonstandardness required less exposure to the stimulus in real time than ratings of confidence-eagerness. The main reasoning here was that visual cues of ethnicity and the high frequency of cues pertinent to nonstandardness would make the former dimension more immediately relevant to a rater than the latter. Accordingly, this study was designed to measure judgmental latencies on a scale by scale basis where the scales were pertinent to the above two-factor model.

METHOD

Subjects

Ss were 15 teachers and prospective teachers from three upper division and graduate summer courses in the Department of Speech at the University of Texas. All but two of the Ss had had some teaching experience. Fourteen of the Ss were Anglo, one was Black. There were five males and ten females in the group.

Materials

Stimulus tapes. A set of six two-minute videotape stimuli was prepared, one for each of six ethno-status groups, Black-Middle (BM) and Lower (BL); Mexican-American-Middle (MM) and Lower (ML); and Anglo-Middle (AM) and Lower (AL). The stimuli were edited from black-and-white videotaped interviews of 11 and 12 year-old fifth and sixth grade boys who were representative of the six ethno-status groups, as drawn from the Austin, Texas area. The interviews, conducted in a living-room-like atmosphere by an Anglo woman identified as a teacher, centered around two probes designed to elicit continuous discourse. The probes were: "Tell me about the television programs you like to watch," and "Tell me about the games you like to play." Thus each two-minute test tape contained either a boy's description of his favorite television program or a game he liked to play.

Semantic differential. Scales selected for use were derived from previous research (Williams, Whitehead, and Traupmann, 1970a). The judgmental model of confidence-eagerness and ethnicity-nonstandardness was indexed by scales 1 to 5 and 6 to 10 respectively in Table 1. Scales 11 to 15 were filler items. These scales were individually printed on Hollerith data cards which were prepunched to facilitate subsequent collation and scoring.

Procedure

Ss were tested individually while seated at a small table approximately four feet from a 21-inch television monitor. A foot-switch, located under the table allowed the S to signal E who was located in an adjacent room where the television monitor was controlled.

S was instructed to depress the footswitch for any duration up to two minutes of viewing the videotape stimulus. This footswitch also controlled an event marker, making it possible for E to record the incidence and duration that S had signalled for tape playback. For each videotape presentation, S was given a shuffled deck of 15 scale cards and was instructed to distribute these cards scale-side up on the table in front of him. S was then told to begin watching the tape (signalling by footswitch) and to complete the scales in any order he wished. S was instructed to stop the stimulus tape and mark the scales as soon as he was able to make a judgment. As S completed each scale he was instructed to place the card in a nearby box. By use of a one-way glass E observed and recorded the time at which each card in sequence had been completed by S. By keeping the response cards in the order that S had stacked them, it was subsequently possible to identify the individual scales involved in the recorded response times. Altogether, testing involved the presentation of six stimulus tapes, the order of which was randomized for each S. Ss were given standard instructions for use of the semantic differential scales. A brief practice session involving a sample stimulus tape and one set of 15 scale cards was undertaken prior to testing.

By interpretation of the event recordings it was possible to calculate for each S the amount of viewing time taken relative to each scale completion. This involved the identification and summation of times that the footswitch had been depressed prior to a given scale's completion.

RESULTS

Latency Variation by Scale and Stimulus

The most direct inquiries were whether the average time measured for individual scale completion would vary, first, across the scales; and, secondly, whether the stimulus sets themselves would show latency differences. To answer these inquiries, a two-by-three-by-ten analysis of variance was undertaken with response latency as the dependent variable.

Relative to the above order of inquiries, there was a significant main effect, $F(9,126)=5.6, p<.01$ across the scale variable. The means for the levels of this variable are presented in Table 2, as are the results of a Duncan (1955) based multiple mean comparison. It may be recalled that the anticipation was that scales pertinent to ethnicity-nonstandardness ratings would be used prior to those pertinent to confidence-eagerness. As can be seen from Table 2, this anticipation was not realized in the data. Although there was a trend in this direction, the differences were not significant between the first cluster of two scales from the ethnicity-nonstandardness dimension and the second cluster of two scales from the confidence-eagerness dimension Thus, while there is some variation in individual scales, it may be concluded that the dimensions of the two-factor judgmental model do not differ markedly in terms of response latency.

Relative to the second inquiry--differences relative to ethnicity or status of the child--there were significant sources of variation. One was a significant main effect, $F(2,28)=3.3, p<.05$, involving the ethnicity variable. The order of latencies was as follows: B (96.5 sec

M (91.1 sec.), and A (84.8 sec.). There was a significant ethnicity-by-status interaction, $F(2,28)=5.6, p<.01$. The means pertinent to this interaction are summarized in Table 3. Here the source of the interaction is that the aforementioned latency differences by ethnicity only appear for the middle status children, the lower status children's means being roughly equivalent. Although the present design does not provide a basis for objectively interpreting reasons for this pattern, one speculation is as follows: The average latency--here, say, about 91 sec.--would be observed when Ss are responding to stimuli that generally "fit" their stereotype expectations. If that fit is exceptionally good--that is, if the videotape of the child is in direct accord with expectations--the latency may be even less than average. On the other hand, when the expectation may run counter to a stereotype, the latency may be longer than average. The present pattern could fit the average stereotypes held by a group of young predominantly Anglo teacher-Ss. To be sure, however, this is a speculation in need of further research.

Latency Variation by Magnitude of Rating.

Another possible factor related to latency variation was the magnitude of individual scale ratings--that is, the degree to which a child was rated as favorable (or unfavorable) on an individual scale. Dual arguments could be made for having either a significant positive or negative correlation between latency and actual scale markings. Thus, for example, there could conceivably be a bias for Ss to mark unfavorable characteristics first or vice-versa. Accordingly, correlational analyses were undertaken for each scale relative to its

corresponding latencies. Each of the ten correlation coefficients were tested for significance against a null hypothesis of zero correlation. No correlations were statistically significant. In fact, the average (by z-transformation) correlation between scale marking and latency was negligible (.080).

DISCUSSION

The primary finding of the present study was that both ethnicity-nonstandardness and confidence-eagerness were relatively close to one another in terms of average rating latency. In brief, the implication was that the dimensions of the two-factor judgmental model do not tend to precede one another markedly in response time. Further, from Ss own control of the videotape stimuli, it was found that the average response latency across all stimuli was roughly on the order of one and one-half minutes. Some latency differences were found as a function of child ethnicity and status, however, the patterns of these differences could only be interpreted speculatively. Finally, no relation was observed between the magnitude of ratings and the latency of same.

Theoretical implications of the study relate mainly to the temporal similarity of the two dimensions of the judgmental model, and the generality of this similarity across child ethnicity and status, as well as across magnitudes of scale rating. A practical implication is that testing designs of the present type can safely be used with two minutes of stimulus presentation, and that temporal interactions with judgmental factors should remain nil. These implications depend, of course, upon having children and Ss of the same general category as used in the present study.

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TABLE 1. Scales used to index the two-factor model and fillers.

1. THE CHILD SEEMS: *reticent-to-speak--eager-to-speak
2. THE CHILD SEEMS: *hesitant--enthusiastic
3. THE CHILD IS: active--passive*
4. THE CHILD SEEMS TO: enjoy--dislike TALKING*
5. THE CHILD SEEMS: *unsure--confident
6. THE CHILD SEEMS CULTURALLY: *disadvantaged--advantaged
7. THE CHILD SOUNDS: Anglo-like--does not sound Anglo-like*
8. LANGUAGE SPOKEN IN THIS CHILD'S HOME IS PROBABLY: standard American style--marked ethnic style*
9. THE CHILD'S HOME LIFE IS: very similar--very different FROM YOURS WHEN YOU WERE HIS AGE*
10. THE CHILD'S FAMILY IS PROBABLY: *low-social-status--high-social-status
11. THE CHILD SEEMS TO BE: interested--uninterested IN HIS ENVIRONMENT*
12. THE CHILD SEEMS: intelligent--unintelligent*
13. THE CHILD SEEMS: *non-competitive--competitive
14. THE CHILD PROBABLY SPENDS: large--small AMOUNT OF TIME AWAY FROM HOME*
15. THE CHILD IS: determined--not determined IN SCHOOL*

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*The asterisks define the pole of the scale assigned a value of 1.0 in the quantification scheme. The asterisks did not appear on the actual instrument.

TABLE 2. Ranked mean latencies of the 10 response scales.

Variable	$\bar{X}$ Latency
lang. std. Am.	74.7a*
Anglo-like	74.9a
eager-to-speak	85.8ab
enjoys talking	86.6ab
enthusiastic	91.0bc
fam. high soc. status	93.4bcd
confident	94.4bcd
active	99.1cd
home similar to yours	103.6d
cult. advant.	104.7d

*Means of a common subscript are not significantly different ($p<.05$) from one another.

TABLE 3. Mean latencies in seconds for the ethnicity-by-status interaction.

		Ethnicity		
		B	M	A
Status	M	102.3	90.0	74.8
	L	90.6	92.3	94.8